

### WHAT IS CLAIMED IS:

1. A battery pack, comprising a housing (3) having a plurality of cooling opening (2a, 2b) formed therein; and at least one separation wall (5) formed of a plurality of current cells (4) arranged flow-tight adjacent to each other, the at least one separation wall (5) being arranged between at least two cooling openings (2a, 2b) and projecting flow-tight into an interior of the housing (3) at a side of the openings, whereby the separation wall (5) is cooled by an air stream flowing therearound.

2. A battery pack according to claim 1, wherein the at least two openings (2a, 2b) comprises a first cooling opening (2a) and a second cooling opening (2b), the first (2a) and second (2b) cooling openings being arranged at an open side (8) of the housing (3) which is flow-tight adjoined by the separation wall (5).

3. A battery pack according to claim 2, wherein the current cells (4) are axially supported on a web (9) projecting inward from the

open side (8) of the housing (3) and arranged between the first cooling opening (2a) and the second cooling opening (2b).

4. A battery pack according to claim 1, wherein the plurality of cooling openings (2a, 2b) comprises at least three cooling openings (2a, 2b), and wherein the pack comprises two separation walls (5) arranged between respective pairs of the three cooling openings.

5. A battery pack according to claim 4, wherein the cooling openings (2a, 2b) and the two separation walls (5) are symmetrically arranged in the housing.

6. A battery pack according to claim 5, wherein the cooling openings (2a, 2b) and the separation walls (5) are arranged mirror-symmetrically.

7. A battery pack according to claim 2, further comprising electrical contact means (10) provided at the open side (8) of the housing (3).

8. A battery pack according to claim 1, further comprising air distribution means (12) for uniform separation of the air stream (8) in a plurality of separate streams.

9. A battery pack, comprising a housing (3) having a plurality of cooling opening (2a, 2b) formed therein; and at least one separation wall (5) formed of a plurality of current cells (4) arranged flow-tight adjacent to each other,

wherein the plurality of cooling openings (2a, 2b) have at least one first opening (2a) and at least one second opening (2b), and

wherein an air volume (V), which enters through the at least one first opening (2a) and exits the at least one second opening (2b), flows, in form of an air stream (6), along opposite sides (7a, 7b) of the at least one separation wall (5) in opposite directions.